



Helping Teachers Use Data

Worthington Hooker School, Connecticut • June 2008

Topic: National Math Panel: Critical Foundations for Algebra

Practice: Mastery Framework

Highlights

- Providing training in the data team process and establishing the teams in K-8 schools led by teachers
- · Data teams held once or twice a month
- Teachers bring to data meetings results of recent math benchmark assessments for classes in templates
- Teachers review test and results and analyze weaknesses, commonalities across classes
- Teachers discuss strategies, to employ. that will address weaknesses in the future
- Follow up to implement strategies, implement assessments and see if there
 has been improvement
- At district level, coaches meet together twice a month to review math intervention plans and results from data team process
- · Review strands where districtwide focus in needed



About the Site

Worthington Hooker School New Haven, CT

Demographics

45% White

25% Black

22% Asian

7% Hispanic

37% Free or Reduced-Price Lunch

11% English Language Learners

6% Special Education

The Worthington Hooker mathematics program exemplifies the goals of the New Haven School District in holding high expectations for all students and preparing them for STEM career options. The school implements these features:

- Focus on fewer topics at deeper level of understanding;
- Cross-grade units with "significant tasks";
- Benchmark testing four to seven times a year;
- Extensive focus on number sense and fractions;
- Roles for specialist teachers (physical education, music, visual arts) in providing additional math practice;
- Bi-monthly school level data team meetings; and,
- Monthly coaches meetings at a district level to review results of school-level data team meetings.

Full Transcript

I am Pat Morgan, and I am the coordinator of instructional coaches for New Haven Public Schools.

Currently, we have almost 30 math coaches in our district in New Haven. We aligned ourselves with the Center for Performance Assessment, and brought in some folks that were able to come in and talk to our instructional coaches and myself and administrators about the data team process, and how data collection and the use of this would be able to improve our student achievement.

We offered a lot of initial training on: "What do you do? What is a data team process, and what does a data team do?" So to that, we now have data teams in our K-8 schools—they are at all sites—and what we have done is empowered teachers to lead the data team process in their school.



Data teams are held once to twice a month, for an hour in duration. At a data team, for example, in say grade 5 or grade 6, if we have two or three staff members at that grade level, they would come together to meet for that specific time and what they would do, they would come with the outcome of a recent math benchmark assessment. They would come with their class and how that class did on that assessment, percentage-wise—who were the basic students, who were the proficient students, or who were the goal students—and have this in a template and bring that information. The data team, those folks would sit around the table and talk about those results, look at the math test, for instance, the geometry test: "Where were the strands? Where were the areas that our students were weak in? Now, are there any commonalities between my class teacher A and teacher B? What can we red flag here as the areas of concern?" So this would be the discussion of the data team.

Most important is, we are trying to engage our members of the data team to talk about strategies, and the specific strategies that we can use and employ that are going to change these outcomes in the future. We want to be able to have that teacher say, "I use a specific Marzano strategy. I worked very heavily with graphic organizers, certain manipulatives and other things, and that's how I was able to achieve those grade scores." And that dialogue is very powerful and important, so, for the other teachers.

And then the teachers would agree, "Okay, well, we have two or three areas of focus here that we want to work on, and we are going to employ these strategies, we are going to agree to go back to our classrooms and work very heavily and focused in these areas. We are going to administer another common assessment; a small one, now, not something as large as the recent math benchmark assessment, but something, maybe seven to ten questions, a couple of open-ended questions—open-endeds always tell a little bit more about what we want to know—a few multiple choice grid-in. So these kind of mirror our state test. And then we are going to come back and we are going to look at these results to see, in fact, if there was any movement, if there was any growth with our students." And then the process goes on and repeats itself; as I said, twice a month is what we are looking for a school to do.

In terms of the 30 math instructional coaches, who meet with the math department at least twice a month for professional development, we would use that time to go over the math intervention plans that the department has set out. Now these intervention plans tie-in with the data team process at the school level. We have had several sessions this year where the coaches come with data, with their binders, with their wealth of information that they have collected from the data teams. They don't actually run or lead every data team. We don't feel as that's the best use of their time, but they keep their hands on and they know what the big picture looks like. So when the coaches come to a meeting bringing this information, they sit down and share, and what we do, or what I have done in the past, is go through a particular assessment test that was recently given, looking at some of the strategies that we want employed for intervention, and then see if there are any commonalities in the entire district on this particular assessment test.